




# **TIPS FOR THE FRCM PRIMARY & INTERMEDIATE**

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# The new FRCCEM

- FRCCEM exam has recently been re-structured and the format altered.
- Prior to this the examination was two separate exams: MRCEM and FRCCEM
- Now merged into a single examination that will take the candidate all the way through their training from the foundation years until they become a consultant.

# New MRCEM/FRCEM Exam Structure

- From **August 2016**, the Royal College of Emergency Medicine is changing the examination structure of both the MRCEM and FRCEM. These changes will involve changes to examination titles, changes to the examination blueprint and also to the question number and styles. The changes will be introduced in phases between **August 2016 and August 2018**.
- **from August 2016** the MRCEM Part A will be replaced by the **FRCEM Primary Examination** and the MRCEM Part B will be replaced by the **FRCEM Intermediate SAQ Paper**
- **in autumn 2017** a new **FRCEM Intermediate Situational Judgement Paper (SJP)** will be introduced to replace the MRCEM Part C for UK trainees. From this point UK trainees will have the option of taking the Intermediate SJP or the MRCEM Part C in order to progress to FRCEM Final examinations.
- **from 2018**, all UK trainees must pass the Intermediate SJP paper in order to progress to FRCEM Final Examinations.
- **the MRCEM Part C will continue after 2018** for non-trainees (UK and international) and those interested UK trainees who wish to obtain MRCEM and become Members of the College of Emergency Medicine. It will be renamed the **MRCEM OSCE**.
- The primary source of curriculum information for all exams will remain the RCEM Emergency Medicine Curriculum (last updated August 2015) and in addition for the FRCEM Primary, the Basic Sciences Curriculum (last updated June 2010)

## MRCEM OSCE

- The MRCEM Part C will continue after **August 2018** as the MRCEM OSCE. It will continue to examine the competencies of Year 1-3 of the Emergency Medicine 2015 Curriculum in the same format as the current Part C - a circuit of mock clinical scenarios or OSCEs.

## MRCEM

- Candidates (trainee or non-trainee, UK or international) who have passed the following:
- the MRCEM Part **A** before **August 2016** or the FRCER Primary after August 2016 **and**
- the MRCEM Part **B** before **August 2016** or the FRCER Intermediate SAQ after August 2016 **and**
- the MRCEM **Part C/OSCE**
- will be eligible for Membership of the Royal College of Emergency Medicine (MRCEM) by examination as before.

## FRCER Finals

- UK Emergency Medicine trainees who have passed the following:
- the MRCEM Part A before August 2016 or the FRCER Primary after August 2016 **and**
- the MRCEM Part B before August 2016 or the FRCER Intermediate SAQ after August 2016 **and**
- the MRCEM **Part C/OSCE** before **August 2018** or the FRCER **Intermediate SJP** after Autumn 2017
- will be eligible to progress to sit FRCER Finals.


# The FRCEM Primary Exam Breakdown

- The first step in the new FRCEM examination is the new FRCEM primary examination
- The paper is **three hours** long and comprises **180 single best answer questions**.
- **IELTS Level 7** is the expected standard for completion of the FRCEM examinations.
- The exam is based on the RCEM Basic Sciences Curriculum (<https://www.rcem.ac.uk/docs/Training/1.4.4%20Basic%20Sciences%20Curriculum.pdf>)


# Worth noting!

There have been some content changes  
from the old MRCEM Part A

- No longer biochemistry questions
- Haematology is still present but has been merged with the Pathology section and it is possible there will now be LESS questions on this topic.



# The following areas are tested in the following proportions:

- Anatomy (60 questions)
  - Physiology (60 questions)
  - Pharmacology (27 questions)
  - Microbiology (18 questions)
  - Pathology (9 questions)
  - Evidence-Based Medicine (6 questions)
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## ■ Anatomy

- Upper limb
- Lower limb
- Thorax
- Abdomen
- Head and Neck
- Central Nervous System
- Cranial Nerve Lesions

## ■ Physiology

- Basic cellular physiology
- Respiratory physiology
- Cardiovascular physiology
- Gastrointestinal physiology
- Renal physiology
- Endocrine physiology

### Pharmacology

Gastrointestinal pharmacology  
Cardiovascular system  
Respiratory system  
Central Nervous System  
Infections  
Endocrine system  
Fluids and electrolytes  
Musculoskeletal system  
Immunological products and vaccines  
Anaesthesia

### Microbiology

Principles of microbiology  
Pathogen groups

### Pathology

Inflammatory responses  
Immune responses  
Infection  
Wound healing  
Haematology


### Evidence Based Medicine

Statistics  
Study methodology  
Principles of critical appraisal





# Anatomy

- The Anatomy syllabus is vast
  - Most candidates find it the most difficult aspect of the exam to get to grips with.
  - So good understanding of the curriculum will really help you
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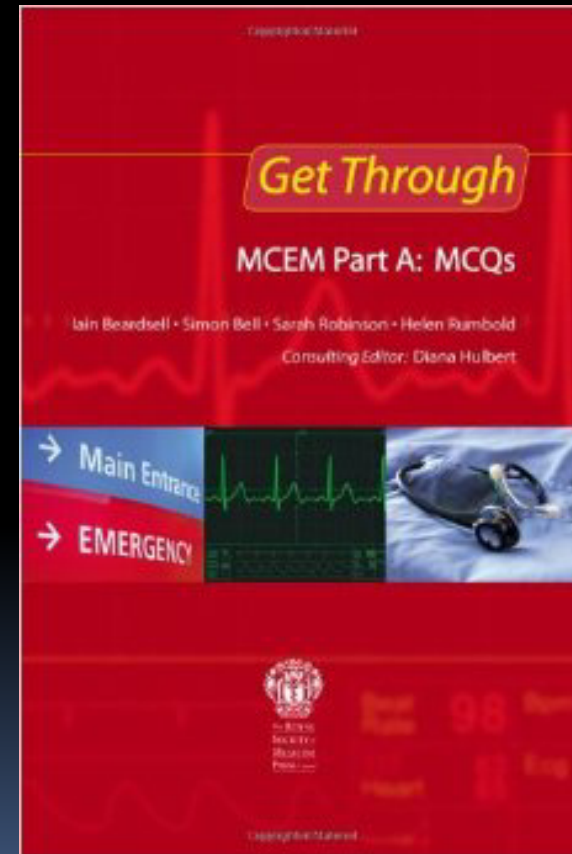
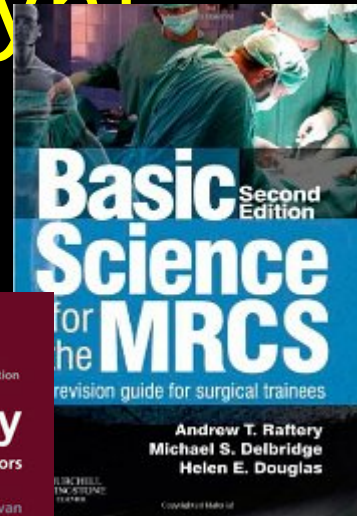
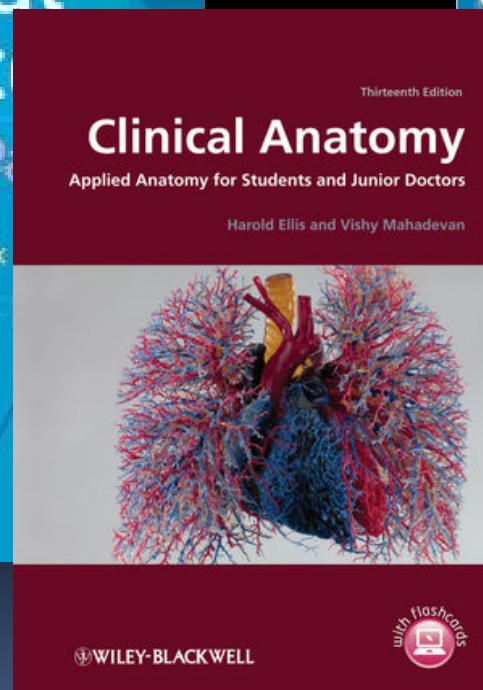
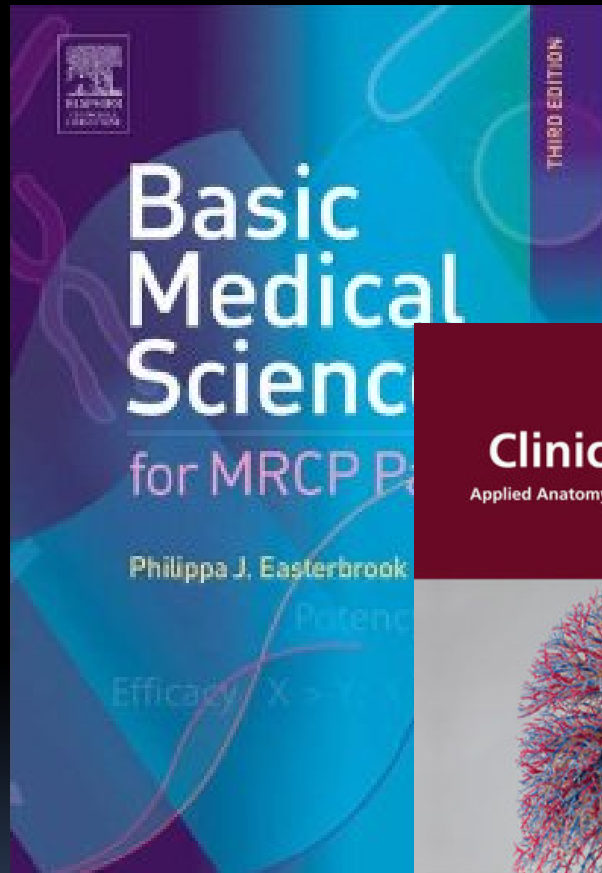
# Preparation before the FRCEM Primary

- At least 6 months
- Some suggested textbooks can be found on the Royal College of Emergency Medicine website.
- Mainly revision on Anatomy and Physiology, which together account for 60-70%

# Important Books for MRCEM part A

- Oxford Handbook of Emergency Medicine.  
“4<sup>th</sup> edition”
- Revision Notes for ~~MCEM part A~~/Primary.
- Basic Medical Science for MRCP part 1.  
“for Physiology, Pharmacology & Statistics”
- Basic Science for the MRCS.  
“for Anatomy & Pathology”
- **Get Through MCQ.** “the most important book”

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Second Edition  
Edited by  
Mark Harrison



# Helpful websites

- <http://lifeinthefastlane.com>
- <http://stemlynsblog.org/>
- [http://frcemsuccess.com/frcem-primary-revision/  
?gclid=CJb8iPzPrtICFe4yowodQhANCw](http://frcemsuccess.com/frcem-primary-revision/?gclid=CJb8iPzPrtICFe4yowodQhANCw)
- <https://www.medicalexamprep.co.uk/>
- [https://www.pacelinemedical.com/  
frcemprimarycourse/career-progression/](https://www.pacelinemedical.com/frcemprimarycourse/career-progression/)



**TOPICS SHOULD BE COVERED  
CAREFULLY**

# Anatomy

- Rotator cuff.
- Neuro-vascular supply & nerve injuries.
- Dermatomes.
- Diaphragm (& its openings).
- Dangerous area of the face.
- Cranial nerves (esp. 2<sup>nd</sup>, 5<sup>th</sup> & 7<sup>th</sup>).
- Femoral triangle & adductor canal.
- Ottawa rules (ankle, foot & knee).




# Infections & Microbiology

- Sepsis & SIRS.
- HIV.
- Tetanus.
- Noro & Rota viruses.
- H.pylori.
- E.coli.
- food poisoning.
- Meningitis.
- Incubation period table (Oxford handbook).
- UK immunization schedule.
- Notifiable diseases in UK.



# Pharmacology

- Anticoagulants.
  - Alcohol.
  - Antibiotics.
  - Antidotes.
  - Sedation & Analgesia.
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# The New Question Style

- moved away from the old true-false style multiple choice questions used in the MRCEM Part A to **single best answer questions (SBAQs)**.
- Single best answer questions are the most commonly question style currently encountered in medical exams.
- They require convergent thinking and the ability to come up with a single answer to a set problem.
- It is easier for the examiner to test higher order thinking, such as application and evaluation of knowledge, in a SBAQ than in the true/false style questions that were previously used.

**Standard format SBA questions usually have three parts:**

- A statement or a scenario that the question will be asked about
- The question itself
- The answer options, which will include one single correct answer

# Example 1

**A 38-year-old man suffers a laceration to his arm that damages the posterior cutaneous nerve of the forearm. Which of the following best describes the sensory area supplied by this nerve?**

- A. The medial half of the palm
- B. A tapered strip of the middle portion of the posterior forearm
- C. Part of the posterior aspect of the upper arm
- D. The posterior surface of the lateral three and a half digits and the associated areas of the palm
- E. The lateral aspect of the palm

**Answer: B.** A tapered strip of the middle portion of the posterior forearm

**ANTERIOR**



**POSTERIOR**



POSTERIOR CUTANEOUS  
NERVE OF THE ARM



INFERIOR LATERAL CUTANEOUS  
NERVE OF THE ARM



POSTERIOR CUTANEOUS  
NERVE OF THE FOREARM



SUPERFICIAL BRANCH OF  
THE RADIAL NERVE


# Example 2

- A 45 year old man requires procedural sedation for DC cardioversion of atrial fibrillation. You plan to use propofol. Sedation is most likely to occur as a result of action on what type of receptor?
- A - Dopamine
- B - Gamma-aminobutyric acid (GABA)
- C - Kainate
- D - N-methyl-D-aspartate (NMDA)
- E - Serotonin

**ANSWER - B**



## Others

- ABG interpretation & O<sub>2</sub> therapy.
  - O<sub>2</sub> Hb curve.
  - Head injury.
  - Anaphylaxis.
  - Statistics.
- 


# Tips for the FRC EM Intermediate

- Second part of the new FRC EM examination
- Twice yearly
- **60, three mark short answer questions (SAQs)**
- Mapped to the competences of Year 1-3 of the Emergency Medicine Curriculum (ACCS Plus)
- Mostly clinical and tests topics that are commonly encountered in the Emergency Department setting





# Topics tested include:

- General medicine
  - Toxicology
  - Trauma & Orthopaedics
  - Paediatrics
  - Surgery
  - Anaesthesia
  - Ophthalmology
  - ENT
  - Maxillofacial surgery
  - Obstetrics & Gynaecology
  - Psychiatry
  - Ethics & Law
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# Preparations

- Familiarise yourself with the Year 1-3 competencies in preparation for sitting the FRCER Intermediate exam (can be found in the 2015 curriculum)  
[https://www.rcem.ac.uk/docs/Training/RCEM%202015%20Main%20Curriculum%20-%20Applicable%20from%20August%202016%20\(approved%2023%20Nov%202015\)%20\(Aug%202016%20update1\).pdf](https://www.rcem.ac.uk/docs/Training/RCEM%202015%20Main%20Curriculum%20-%20Applicable%20from%20August%202016%20(approved%2023%20Nov%202015)%20(Aug%202016%20update1).pdf)
- No daunting volume of knowledge required as the primary
- Many of the questions take on the form of **data interpretation**, with questions based around blood tests, an X-ray or an ECG
- Start preparing at least 6 months before the examination.

# Intermediate Exam Question Style

- **Short answer questions (SAQs)**
- Ability to formulate an answer based on the information given in the question without the advantage of having options to choose from
- Clinical scenario followed by a list of questions that require knowledge about the subject matter

# An example of Intermediate SAQ

- A 60-year-old man presents with dizziness and palpitations. Whilst in the Emergency Department the following rhythm strip is recorded:



- **(a) What is shown on the rhythm strip? (1 mark)**
  - Torsades de pointes
  
  - **(b) Which drug treatment should be initiated (please include dose)? (1 mark)**
  - 1-2 g of IV magnesium sulphate over 2-3 minutes
  
  - **(c) Give an electrolyte abnormality that is commonly associated with this condition? (1 mark)**
- Any of:
- Hypokalaemia
  - Hypomagnesaemia
  - Hypocalcaemia

# Feedback from the first new style FRCEM

## Intermediate

- Getting through the exam in time was difficult.
- Many struggled to complete the entire paper in time
- Few managed to re-read and check their answers.
- So, it is strongly recommended to practice answering questions under timed, exam conditions if possible.
- Online resources
- Timed mock exams (group study)

# Other frequently tested aspects

- Scoring systems and clinical guideline
- Familiarise yourself with the various scoring systems used in the ED setting, such as:
  - CURB-65
  - ABCD-2
- Relevant NICE guidelines topics
- SIGN guidelines.

**\*\* Overall it is a replica to your every day work in the Emergency Department**

# FRCEM Intermediate Situational Judgement Paper (SJP)

- The FRCEM Intermediate SJP will be introduced from Autumn 2017 to replace the MRCEM Part C for UK trainees. The SJP will be a written paper designed to test a candidates ability to understand and respond appropriately to real world clinical situations; it is not so much a test of medical knowledge but more of a candidates integrity, perspectives, team involvement and adaptability.
- A blueprint of the new Intermediate SJP exam can be found in the RCEM website





Good Luck!